

**Teacher:** Brittany Schwab, Barbara Long, Jim Perlingeiro ,James Wilborn III

**Title:** Around the World in 8 Biomes

**Description of Activity:** Students will understand the different biomes and their characteristics: animals, vegetation and weather. Students will convey that knowledge through Kidspiration, Microsoft Word, and Microsoft Power Point.

**Suggested grade level:** The suggested grade level is for intermediate students.

This unit would be appropriate for grades three through five.

**Pennsylvania Subject Area Standards:**

**Biological Sciences:**

3.3.7 A Describe the similarities and differences that characterize diverse living things

3.3.7 D Explain basic concepts of natural selection

**Technological Devices**

3.3.7 D Apply computer software to solve specific problems

**Quality of writing:**

1.5.5 A Write with a sharp, distinct focus identifying topic, task and audience

1.5.5 D. Write with an understanding of the stylistic aspects of composition

1.5.5 E Revise writing to improve

1.5.5 F Edit writing using conventions of language

**Research**

1.8.5 A Select topic for research

1.8.5 B Locate information using appropriate sources and strategies

1.8.5 C Organize and present main ideas from research

**Physical Characteristics of places and regions**

7.1.6 B Describe and locate places and regions

7.2.6 A Describe the physical characteristics of places and regions

**NETS Standards:**

1. **Creativity and Innovation**: Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes
2. **Communication and Collaboration**: Students use digital media and environments to communicate and work collaboratively including at a distance to support individual learning and contribute to the learning of others
3. **Research and Information Fluency**: Students apply digital tools to gather, evaluate and use information

4. **Critical Thinking, Problem Solving, and Decision Making**: Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions about appropriate digital tools and resources

1. **Digital Citizenship**: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
2. **Technology Operations and Concepts**: Students demonstrate a sound understanding of technology systems and operations.

**Learning objectives:**

After using the Internet to research one biome of choice, the students will identify and organize the four main characteristics; type of biome, weather, vegetation, and animals, of a specified biome using the program Kidspiration with 80% accuracy.

After using the Internet to research one biome of choice, the students will identify the four main characteristics of a biome; geographical location, weather: high and low, animals, and vegetation, by creating a diary entry, on Microsoft Word, to explain the events of one day in the specified biome with 80% accuracy.

After using the Internet to research one biome of choice, the students will identify the four main characteristics; type of biome, weather, animals, and vegetation with a PowerPoint presentation with 80% accuracy.

**Materials required:** Lined paper, Pencils, Internet, 23 laptops, MS PowerPoint, MS Word, Kidspiration, flash drive, color ink jet printer, Interactive Whiteboard

**Approximate number of class periods and length**: 12 class periods

**Classroom management strategies:**

All assignments will be done in the classroom.

“A Day in a Biome” –

Students will work individually on systems organizing information then inputting information into software tool. Teacher will rotate to monitor progress.

“Travel to a Biome” –

Students will work individually yet rotate in workshops. Rotation has been set to every 15-20 minutes. Teacher will rotate among workshops to monitor task completion.1) Biome Video 2) Internet Research Workshop 3) Textbook Research Workshop 4) Non-fiction Book Research Workshop 5) Brainstorm/Organize/Rough Draft Workshop 6) Diary Entry Final Draft – Microsoft Word

“Showcase a Biome” –

Students will work individually. Teacher will rotate among workshops to monitor task completion.

**Warm up:**

* ‘Travel to a Biome’ warm up: Students view the video Elements of Biology: Biomes: The Adaptations of Organisms
* Students will view tutorials on Kidspiration, Micosoft Word, and PowerPoint to aid them in meeting the technology requirements for this unit.

**Activities/ Procedures:**

* **Travel To A Biome Activity: Day 1**
  + **After watching the biome video, students select which of the 8 types of biome they would like to research.**
  + **Students will spend the remainder of the first day researching the 4 main characteristics of their biome.**
* **Travel to a Biome: Day 2**
  + **Students will view Kidspiration tutorial at** [**www.inspiration/Kidspiration**](http://www.inspiration/Kidspiration) **to help them design their concept map.**
  + **Students will input their information into Kidspiration to create a concept map.**
  + **Students can view an example Biome map at** [**www.mbgnet.net/index.html**](http://www.mbgnet.net/index.html)
* **A Day in a Biome: Day 1/2**
  + **Students will be working towards writing a diary entry detailing the experience of one day in their selected biome.**
  + **Students will take two days to research their biome using the following resources:**
    - **Internet**
    - **Textbook**
    - **Non-fiction texts**
* **A Day in a Biome: Day 3/4**
  + **Students will use the next 1.5 days to brainstorm and organize a rough draft of their diary entry.**
  + **Students will workshop their rough draft by taking part in peer editing and teacher conferencing.**
* **A Day in a Biome: Day 4/5**
  + **Students will use Microsoft Word to create the final draft of their diary entry.**
  + **Students view a Word Art tutorial at** [**www.homeandlearn.co.uk/mw/s6p6.html**](http://www.homeandlearn.co.uk/mw/s6p6.html) **so that they can include topic-related graphics that are visually appealing.**
  + **Students are required to incorporate visually stimulating fonts, colors, as well as topic related images.**
* **Showcase a Biome: Day 1**
  + **Students continue to research their selected biome using online resources.**
  + **Students will view PowerPoint Tutorial at** [**www.actden.com/pp/**](http://www.actden.com/pp/) **to gain skills in creating slides, inputting text, and adding images and other objects.**
  + **Students will view Tutorial on the SMARTboard.**
* **Showcase a Biome: Day 2**
  + **Students will work on the layout/organization of their Powerpoint slides. These slides will cover:**
    - **Biome Type/Location**
    - **Weather**
    - **Vegetation**
    - **Animal Life**
* **Showcase a Biome: Day 3/4**
  + **Students will input characteristics of their biome into their Power Point.**
  + **Students are required to use no more than 3 points per slide**
  + **Students are required to include one topic-related image on each slide**
* **Showcase a Biome: Day 5**
  + **Students share their PowerPoint Presentations on biomes with the class.**
  + **Students will use a wireless link to the classroom SMARTboard to present their ‘showcases.’**

**Assessment strategies:**

Students will be assessed using a rubric for each activity as shown here:

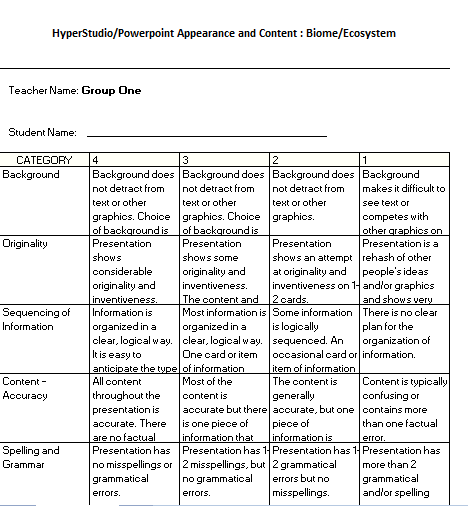
**Kidspiration Concept Map/Travel to a Biome Activity**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Student Name:     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |  |
|  |  |  |  |  |
| CATEGORY | 4 | 3 | 2 | 1 |
| Originality | Product shows a large amount of original thought. Ideas are creative and inventive. | Product shows some original thought. Work shows new ideas and insights. | Uses other people's ideas (giving them credit), but there is little evidence of original thinking. | Uses other people's ideas, but does not give them credit. |
| Content | Covers topic in-depth with details and examples. Subject knowledge is excellent. | Includes essential knowledge about the topic. Subject knowledge appears to be good. | Includes essential information about the topic but there are 1-2 factual errors. | Content is minimal OR there are several factual errors. |
| Organization | Content is well organized using headings or bulleted lists to group related material. | Uses headings or bulleted lists to organize, but the overall organization of topics appears flawed. | Content is logically organized for the most part. | There was no clear or logical organizational structure, just lots of facts. |
| Requirements | All requirements are met and exceeded. | All requirements are met. | One requirement was not completely met. | More than one requirement was not completely met. |

**Microsoft Word/A Day in a Biome Activity Rubric**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Student Name:     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |  |
|  |  |  |  |  |
| CATEGORY | 4 | 3 | 2 | 1 |
| Organization | Content is well organized using headings or bulleted lists to group related material. | Uses headings or bulleted lists to organize, but the overall organization of topics appears flawed. | Content is logically organized for the most part. | There was no clear or logical organizational structure, just lots of facts. |
| Content | Covers topic in-depth with details and examples. Subject knowledge is excellent. | Includes essential knowledge about the topic. Subject knowledge appears to be good. | Includes essential information about the topic but there are 1-2 factual errors. | Content is minimal OR there are several factual errors. |
| Requirements | All requirements are met and exceeded. | All requirements are met. | One requirement was not completely met. | More than one requirement was not completely met. |
| Attractiveness | Makes excellent use of font, color, graphics, effects, etc. to enhance the presentation. | Makes good use of font, color, graphics, effects, etc. to enhance to presentation. | Makes use of font, color, graphics, effects, etc. but occasionally these detract from the presentation content. | Use of font, color, graphics, effects etc. but these often distract from the presentaion content. |

PowerPoint Presentation/ Showcase a Biome Activity Rubric



**Related Web Sites:**

* [www.enchantedlearning.com/biomes/](http://www.enchantedlearning.com/biomes/)
* [www.Unitedstreaming.com](http://www.unitedstreaming.com/) (free registration)
* <http://www.abpischools.org.uk/page/modules/humans_animal_habitats/activity.cfm?coSiteNavigation_allTopic=1> (habitat game)
* <http://www.iknowthat.com/com/L3?Area=Habitats>
* <http://www.woodlands-junior.kent.sch.uk/Homework/habitats.html> (why animals live where they live)
* <http://www.mbgnet.net/index.html>
* <http://www.na.fs.fed.us/spfo/pubs/misc/eco/index.html>
* [Brain Pop - Ecosystems](http://glencoe.mcgraw-hill.com/sites/dl/free/0078695104/167348/00076707.swf)

**Back-up plan: (if the technology fails!)**

* Verbal Presentations
* Create Food chain mobile
* Create collage of an ecosystem
* Create Brochures of Biomes or Ecosystems
* Biome matching game
* Biome Bingo
* Ecosystem Jeopardy
* Read informative books
* Role play living in a particular biome or ecosystem
* Field Trips around the outside of the school to investigate ecosystems.

**Branching out & Accommodations:**

**Below**

* Small Groupings (with teacher)
* Biome Jeopardy Game
* Watching a video on the content
* Matching game on ecosystems
* Guess my habitat game

**Enrichment**

* Role play (Animal interacting with each other)
* Creating own ecosystem
* Write a story of being an animal in a selected region.